

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in this application

Listing of Claims:

1. (Currently Amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding the polypeptide of SEQ ID NO:2, or which is complementary thereto over ~~its~~ the full length of SEQ ID NO:2.

2. (Currently Amended) The nucleic acid molecule of claim 1, which comprises the nucleotide sequence shown in SEQ ID NO:1, or which is complementary thereto over ~~its~~ the full length of SEQ ID NO:1.

3.-5. (Canceled)

6. (Previously Presented) An isolated nucleic acid molecule, which has at least 90% nucleotide identity with SEQ ID NO:1 over its full length, and which encodes a polypeptide that binds a consensus T-box site in DNA and induces IFN- γ production in CD4+ cells.

7. (Canceled)

8. (Currently Amended) A vector comprising the nucleic acid molecule of any one of claims 6, 51, 55, and 58 ~~claim 1~~.

9. (Previously Presented) The vector of claim 8, which is an expression vector.

10. (Previously Presented) A host cell containing the vector of claim 9.

11. (Previously Presented) A method for producing a T-bet protein comprising culturing the host cell of claim 10 in a suitable medium until a T-bet protein is produced.

12. (Previously Presented) The method of claim 11, further comprising isolating the T-bet protein from the medium or the host cell.

13.-49. (Canceled)

50. (Currently Amended) The nucleic acid molecule of claim 6, wherein the polypeptide has at least one activity selected from the group consisting of: ~~inducing IFN- γ production in CD4+ cells, inducing Th1 associated cytokine production,~~ inhibiting production of IL-2, and inducing the differentiation of Thp cells and Th2 cells into Th1 cells.

51. (Currently Amended) An isolated nucleic acid molecule which hybridizes to the complement of the nucleic acid molecule set forth in SEQ ID NO:1 over the full length of ~~the isolated nucleic acid molecule~~ SEQ ID NO:1 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 65°C under stringent conditions, wherein said nucleic acid molecule encodes a polypeptide that binds a consensus T-box site in DNA and induces IFN- γ production in CD4+ cells.

52. (Canceled)

53. (Previously Presented) An isolated nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID NO:2, wherein said nucleic acid molecule encodes a polypeptide that binds to a consensus T-box site in DNA and induces IFN- γ production in CD4+ cells.

54. (Previously Presented) The isolated nucleic acid molecule of claim 1, further comprising a nucleotide sequence encoding a heterologous polypeptide.

55. (Currently Amended) An isolated nucleic acid molecule consisting of at least 700 contiguous nucleotides of ~~the nucleotide sequence of~~ SEQ ID NO:1 which sequence comprises a T-box domain, or a nucleic acid molecule consisting of a nucleotide sequence complementary to the at least 700 contiguous nucleotides of SEQ ID NO:1 ~~thereto over the full length of the isolated nucleic acid molecule.~~

56. (Canceled)

57. (Previously Presented) An isolated nucleic acid molecule comprising the nucleotide sequence shown in SEQ ID NO:1, wherein the nucleic acid molecule is labeled with a detectable substance.

58. (Currently Amended) An isolated nucleic acid molecule comprising at least 700 contiguous nucleotides of SEQ ID NO:1 ~~which are complementary to at least 700 nucleotides of SEQ ID NO:1~~ which sequence comprises a T-box domain, or a nucleic acid molecule comprising a nucleotide sequence complementary to the at least 700 contiguous nucleotides of SEQ ID NO:1.

59. (Canceled)

60. (Canceled)

61. (Currently Amended) The expression vector of claim 9, comprising a constitutive promoter ~~promoter~~.

62. (Currently Amended) The expression vector of claim 9, comprising an inducible promoter ~~promoter~~.

63. (Previously Presented) The expression vector of claim 9, comprising a tissue-specific regulator element.

64. (Canceled)

65. (Previously Presented) The nucleic acid molecule of claim 6, wherein the identity is determined by the BLAST program using the default Blastn matrix.

66.-83. (Canceled)

84. (Currently Amended) The nucleic acid molecule of claim 53, wherein the polypeptide has at least one activity selected from the group consisting of: ~~inducing IFN- γ production in CD4+ cells, inducing Th1-associated cytokine production,~~ inhibiting production of IL-2, and inducing the differentiation of Thp cells and Th2 cells into Th1 cells.

85. (Canceled)

86. (Canceled)

87. (Currently Amended; Withdrawn) An isolated nucleic acid molecule comprising a nucleotide sequence encoding the polypeptide of SEQ ID NO:4, or which is complementary thereto over the its full length of SEQ ID NO:4.

88. (Currently Amended; Withdrawn) The nucleic acid molecule of claim 87 ~~claim 1~~, which comprises the nucleotide sequence shown in SEQ ID NO:3, or which is complementary thereto over the its full length of SEQ ID NO:3.

89. (Canceled)

90. (Withdrawn) An isolated nucleic acid molecule, which has at least 90% nucleotide identity with SEQ ID NO:3 over its full length, and which encodes a polypeptide that binds a consensus T-box site in DNA and induces IFN- γ production in CD4+ cells.

91. (Currently Amended; Withdrawn) An isolated nucleic acid molecule which hybridizes to the complement of the nucleic acid molecule set forth in SEQ ID NO:3 over the full length of SEQ ID NO:3 ~~the nucleic acid molecule~~ in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 65°C under stringent conditions, wherein said nucleic acid molecule encodes a polypeptide that binds a consensus T-box site in DNA and induces IFN- γ production in CD4+ cells.

92. (Withdrawn) An isolated nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID

NO:4, wherein said nucleic acid molecule encodes a polypeptide that binds to a consensus T-box site in DNA and induces IFN- γ production in CD4+ cells.

93. (Currently Amended; Withdrawn) An isolated nucleic acid molecule consisting of at least 600 500-contiguous nucleotides of the nucleotide sequence of SEQ ID NO:3 which sequence comprises a T-box domain, or a nucleic acid molecule consisting of a nucleotide sequence complementary to the at least 600 contiguous nucleotides of SEQ ID NO:3 complement thereof thereof over the full length of the isolated nucleic acid molecule.

94. (Currently Amended; Withdrawn) An isolated nucleic acid molecule comprising at least 600 500-contiguous nucleotides of SEQ ID NO:3 which sequence comprises a T-box domain, or a nucleic acid molecule comprising a nucleotide sequence which are complementary to the at least 600 500-contiguous nucleotides of SEQ ID NO:3.

95. (Currently Amended; Withdrawn) A vector comprising the nucleic acid molecule of any one of claims 90, 91, 93, and 94 claim 87.

96. (Withdrawn) The vector of claim 95, which is an expression vector.

97. (Withdrawn) A host cell containing the vector of claim 96.

98. (Withdrawn) A method for producing a T-bet protein comprising culturing the host cell of claim 97 in a suitable medium until a T-bet protein is produced.

99. (Withdrawn) The method of claim 98, further comprising isolating the T-bet protein from the medium or the host cell.

100. (Currently Amended; Withdrawn) The nucleic acid molecule of claim 90 claim 87, wherein the polypeptide has at least one activity selected from the group consisting of: ~~inducing IFN- γ production in CD4+ cells, inducing Th1 associated cytokine production,~~ inhibiting production of IL-2, and inducing the differentiation of Thp cells and Th2 cells into Th1 cells.

101. (Withdrawn) The isolated nucleic acid molecule of claim 87, further comprising a nucleotide sequence encoding a heterologous polypeptide.

102. (Withdrawn) An isolated nucleic acid molecule comprising the nucleotide sequence shown in SEQ ID NO:3, wherein the nucleic acid molecule is labeled with a detectable substance.

103. (Currently Amended; Withdrawn) The expression vector of claim 96, comprising a constitutive promoter ~~promoter~~.

104. (Currently Amended; Withdrawn) The expression vector of claim 96, comprising an inducible promoter ~~promoter~~.

105. (Withdrawn) The expression vector of claim 96, comprising a tissue-specific regulator element.

106.-113. (Canceled)